

Abstract of Disclose

An analog DLL device includes a delay model for modeling delay time for buffering the external clock signal; a phase
5 comparator for comparing a phase of the reference clock signal with an phase of an outputted signal from the delay model; a charge pump for pumping charges; a loop filter for generating a reference voltage; a voltage control delay line and a tracking digital-analog converter which converts the reference
10 voltage to a digital value; and stores the digital value for keeping the reference voltage safely.